WHAT IS CLAIMED IS:

5

35

and

A compact camera module, comprising:
 a lens unit including a plurality of lens;

an image pickup unit including an image 10 pickup device, said image pickup unit being independent from the lens unit and attached to a bottom of the lens unit,

wherein

the image pickup device is disposed in a substantially closed space in the image pickup unit.

2. A compact camera module comprising a lens unit including a lens and a lens holder holding the lens therein and an image pickup unit attached to the lens unit, wherein

the image pickup unit comprises:

a circuit board;

an image pickup device on the circuit board;

a cover member arranged on the circuit board to cover the image pickup device; and

an optical filter arranged with respect to the cover member to face the image pickup device, wherein

the image pickup device is disposed in a substantially closed space formed by the circuit board, the cover member, and the optical filter.

		3.	The	compact	camera	module	as	claimed
in	claim	2.	where	in				•

the cover member includes an air hole to make the substantially closed space in communication with the outside;

the lens unit includes a ventilation channel;

the air hole is in communication with the ventilation channel.

15

the ventilation channel is formed between a wall of a cutout of the lens and the lens holder.

20

5. The compact camera module as claimed
25 in claim 4, wherein
the ventilation channel has an air filter disposed therein.

30

6. The compact camera module as claimed in claim 1, wherein

the image pickup unit is asymmetric with 35 respect to a central line.

		7.	. The	compact	camera	module	as	claimed
in	claim	2.	where	in				

5 the image pickup unit is asymmetric with respect to a central line.

10

8. The compact camera module as claimed in claim 2, wherein

a grounding terminal is formed on a side surface of the circuit board, said grounding

15 terminal including a portion extending to an upper surface of the circuit board; and

the cover member is arranged to be in contact with the portion of the grounding terminal extending to the upper surface of the circuit board.

20

 An image pickup unit for use in
 conjunction with a lens unit in a compact camera module, comprising:

a substantially closed space; and an image pickup device disposed in the substantially closed space.

30

10. An image pickup unit for use in conjunction with a lens unit in a compact camera module, comprising:

a circuit board;

an image pickup device on the circuit board;

a cover member arranged on the circuit board to cover the image pickup device; and an optical filter arranged with respect to the cover member to face the image pickup device,

the image pickup device is disposed in a substantially closed space formed by the circuit board, the cover member, and the optical filter.

wherein

11. The image pickup unit as claimed in claim 10, wherein the cover member includes an air hole to

make the substantially closed space in communication with the outside.

20

5

10

12. The image pickup unit as claimed in claim 10, wherein the image pickup unit is asymmetric with respect to a central line.

30

13. The image pickup unit as claimed in claim 10, wherein

a grounding terminal is formed on a side surface of the circuit board, said grounding

35 terminal including a portion extending to an upper surface of the circuit board; and

the cover member is arranged to be in

contact with the portion of the grounding terminal extending to the upper surface of the circuit board.

5

14. A lens unit for use in conjunction with an image pickup unit in a compact camera module, comprising:

10

a lens having a cutout; and

a lens holder that holds the lens therein, wherein

a ventilation channel is formed between a wall of the cutout and the lens holder.

15

15. The lens unit as claimed in claim 14, 20 wherein the ventilation channel has an air filter disposed therein.

25

16. A method of producing a compact camera module, comprising the steps of:

forming an image pickup unit wherein an image pickup device is disposed in a substantially closed substantially closed space; and

attaching the image pickup unit to a lens unit.

35

30

17. The method of producing the compact

camera module as claimed in claim 16, wherein the step of forming the image pickup unit comprises the steps of:

installing an image pickup device on a 5 circuit board;

covering the image pickup device with a cover member to form the substantially closed substantially closed space; and

arranging an optical filter with respect to the cover member to face the image pickup device.

18. The method of producing the compact camera module as claimed in claim 17, wherein the cover member includes an air hole to make the substantially closed space in communication with the outside.

20

19. A method of producing an image pickup 25 unit for use in conjunction with a lens unit in a compact camera module, the method comprising the steps of:

installing an image pickup device on a
circuit board;

covering the image pickup device with a cover member to dispose the image pickup device in a substantially closed space; and

arranging an optical filter with respect to the cover member to face the image pickup device.

20. The method as claimed in claim 19, wherein the cover member includes an air hole to 5 make the substantially closed space in communication with the outside.